

KEYS TO THE FLORA OF FLORIDA -- 11, *ELYTRARIA*
(ACANTHACEAE)

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ABSTRACT

Elytraria (Acanthaceae) is represented in Florida by a single species, *E. caroliniensis* (Gmel.) Pers., which in turn is here treated as of three varieties, with var. *vahliana* recognized as a new combination. An amplified key is given to the Florida taxa.

KEY WORDS: *Elytraria*, Acanthaceae, Florida flora.

The recognition by M. L. Fernald (in Robinson & Greenman, Bot. Gaz. 22:169. 1896) of a linear-leaved *Elytraria* (Acanthaceae) from Dade County, Florida, was the first departure in American literature from the concept of a uniformly broad-leaved species in the southeastern United States. Fernald saw this South Florida plant as "an extreme form, hardly worthy of specific rank," and was joined in placing it at varietal level by S. F. Blake (Rhodora 17:131. 1915) and R. W. Long (J. Arnold Arbor. 51:279. 1970). Yet the strikingly narrower leaves and the geographic discontinuity from the typical form led J. K. Small (Flora of Miami. 1913; Man. S.E. United States. 1933) and E. C. Leonard (J. Washington Acad. Sci. 24:445. 1934) to treat it as a distinct species.

Examination of a series of specimens (FLAS, FSU, USF) more extensive than those available to the above workers, while confirming the presence of a modestly distinct series of populations in South Florida, has also disclosed the existence largely in the Florida panhandle of a third variant that is intermediate in form and speaks for the treatment of the southeastern complex as a single species. Although overlooked by American workers (e.g., A. F. Clewell, Guide to the Vasc. Flora of

the Florida Panhandle. 1985; R. P. Wunderlin, Guide to the Vasc. Flora of Florida. 1998), it had been recognized and described in 1847 by the German student of the Acanthaceae, C. G. Nees von Esenbach. Use of his epithet requires the following combination.

Elytraria caroliniensis (Gmel.) Pers. var. *vahliana* (Nees.) D. B. Ward, **comb. nov.** Basionym: *Elytraria virgata* Michx. var. *vahliana* Nees in DC., Prodr. 11: 63. 1847.

Although *Elytraria caroliniensis* extends from southern South Carolina into peninsular Florida, in its typical form it does not appear to occur west of the Suwannee River. All collections seen from the Florida panhandle, as well as others from several counties in northern peninsular Florida, differ from the typical form in leaf shape and pubescence, as noted in the accompanying key. These differences were concisely stated by Nees in characterizing his new variety as "foliis oblongis glabris." His citation of a F. Rugel collection, "ad margines paludum et in pinetis," St. Marks, Florida, corresponds to several recent collections from the low hammocks and pine flatwoods of Wakulla County where this variety is of frequent occurrence.

Elytraria Michx. ¹

1. Leaves broadly obovate to elliptic, less than 3x longer than wide; lower surface mostly softly pubescent. Moist hammocks. Peninsular Florida (Columbia, Alachua Cos., south to Charlotte, Highland Cos.); infrequent. May - August. [*E. virgata* Michx.; *Tubiflora caroliniensis* (Walt.) Gmel.]

E. caroliniensis (Gmel.) Pers.
var. **caroliniensis**

The "amplified key" format employed here is designed to present in compact form the basic morphological framework of a conventional dichotomous key, as well as data on habitat, range, and frequency. This paper is a continuation of a series begun in the 1970s (vide *Phytologia* 35:404-413. 1977). I wish to thank David W. Hall and Kent D. Perkins for constructively reviewing the manuscript.

1. Leaves narrowly obovate to linear, more than 3x longer than wide; lower surface glabrous.

2. Leaves narrowly obovate, less than 15x longer than wide. Flatwoods, hammocks, river bottoms. Panhandle Florida (Holmes Co.) eastward, to northeast (Nassau Co.) and the northern peninsula (Levy Co.: Gulf Hammock); infrequent. May - August. [*E. virgata* Michx. var. *vahliana* Nees in DC.]

E. caroliniensis (Gmel.) Pers.

var. **vahliana** (Nees in DC.) D. B. Ward

2. Leaves linear, more than 15x longer than wide. Pinelands, open marl prairies. Endemic to South Florida (north to Lee and Martin Cos.; absent from Keys); rare. All year. [*E. virgata* Michx. var. *angustifolia* Fern.; *Tubiflora angustifolia* (Fern.) Small]

E. caroliniensis (Gmel.) Pers.

var. **angustifolia**(Fernald) S. F. Blake